Land Use

Affected Environment

The affected environment for land use impacts includes the existing corridor and land up to 1,200 feet on either side of the existing corridor. The following discussion describes existing and planned land use in the affected environment, and local, county, and regional plans and policies (including zoning) that affect land use.

Land use is divided into four categories (see Table 3-1). They represent general categories next to and within the corridor. The distribution of these uses is shown on Figure 3-1. In general, developed land occurs at the western (City of Grand Coulee) and eastern (north Spokane) ends of the line. Most agricultural land consists mainly of dryland wheat and other crops located in western and eastern Lincoln County. Most rangeland is present in central Lincoln County and in scattered tracts associated with drainages. Most recreational land crossed on or near the transmission lines is in the north and northwest Spokane area; a small recreation site is crossed in the Grand Coulee area near Banks Lake.

Table 3-1: Land Use Categories in the Corridor

Land Use	Approximate miles	Approximate Percent of Corridor
Developed	8	10
Agriculture	42	50
Rangeland	30	36
Recreation	4	4
Total	84	100

Developed Land

Developed land includes single and multifamily dwellings in subdivisions and rural areas, commercial and industrial businesses, and related lands. Ten percent of the corridor is developed land. Although some farmsteads and other rural dwellings are near the corridor (about 23 rural residences in Lincoln County; 25 rural residences in Spokane County), most residential, commercial and industrial land next to the corridor is near Spokane and Grand Coulee.

City of Grand Coulee and Grant County

The corridor crosses the western edge of the Grand Coulee City urban area in Grant County. Residential, commercial, agricultural and recreation lands, and Banks Lake are in this area (see

Figure 3-2). An expanding regional municipal landfill is also in this area. About 85 buildings are within 1,200 feet of the new right-of-way in Grant County and the City of Grand Coulee.

Approximately 2 miles south of the Grand Coulee Switchyard, the right-of-way would pass adjacent to Pleasant Hills, an older rural residential area within Grant County. It is zoned for agricultural use.

Between the city limits and the north dam of Banks Lake, and north of State Route 155, the new right-of-way would cross North Dam Park, recently developed by the City of Grand Coulee (see the section on **Recreational Land**).

South of SR 155, the new right-of-way would cross an area developed as a regional landfill. The Delano Landfill is located on Grant County property within the city limits of Grand Coulee. The existing landfill site is approximately 35 acres with a tentatively planned expansion area of about 8.5 acres to the east. There are about 20 acres of fill area currently available at the main site. The governments of Grand Coulee, Electric City, Coulee Dam, and Elmer City are jointly developing the landfill. Stage 1 of the landfill is expected to close in the summer of 2003. The entire landfill is expected to close in 2030.

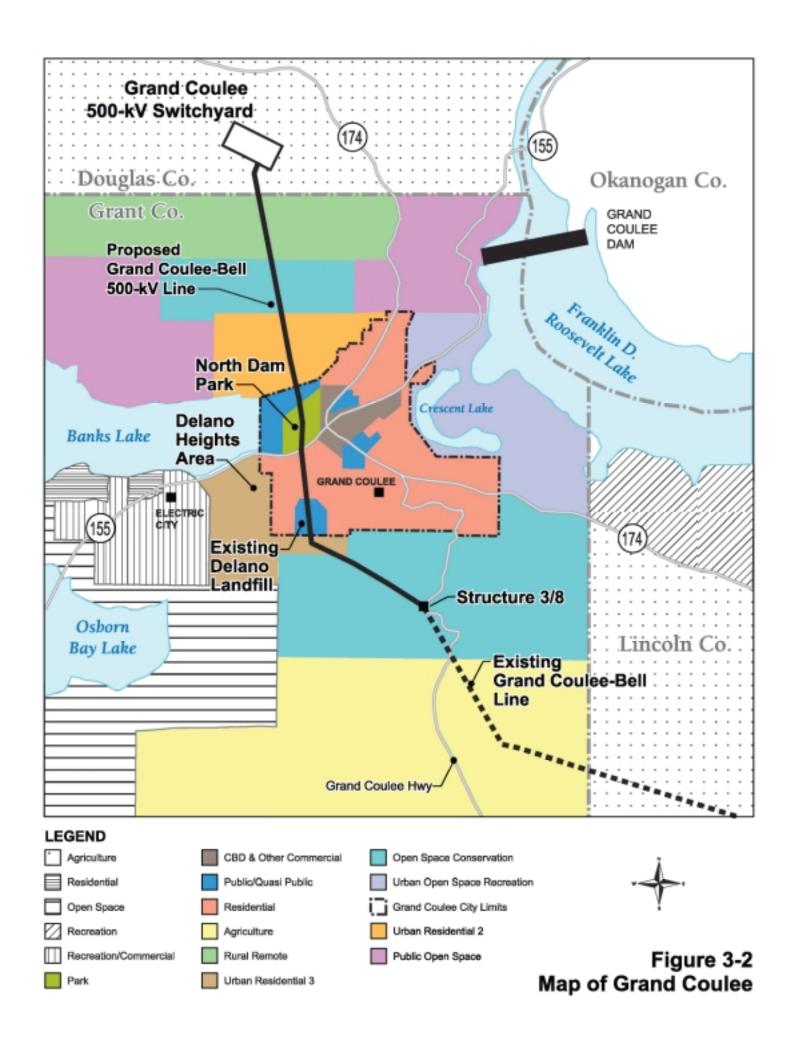
Just west of the landfill, the new right-of-way would be next to Delano Heights, a rural residential area. This residential area is west of Grand Coulee's city limits and is zoned Agricultural and Residential.

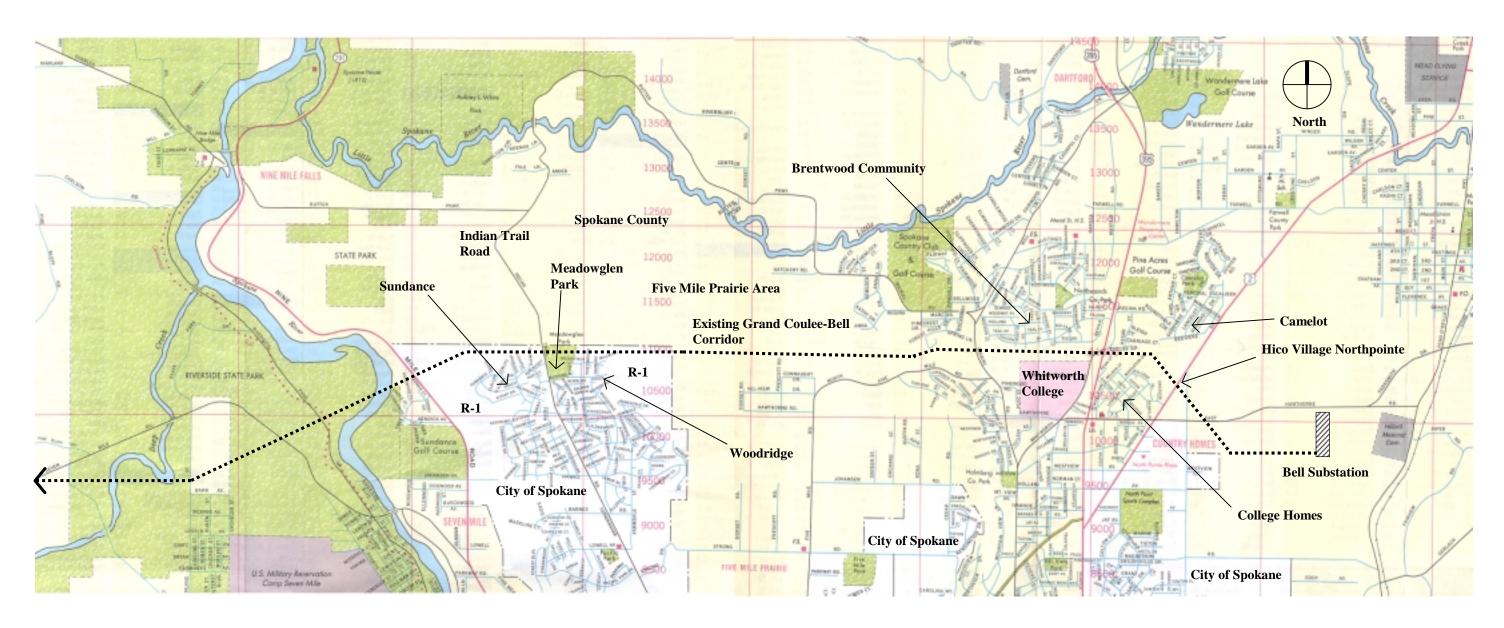
Rural Area Between Grand Coulee and Spokane

Principal land types between Grand Coulee and Spokane are farmlands and rangelands (including woodlands). Farmsteads and other rural dwellings and small commercial businesses are scattered in this area. Developed areas are distant from each other. A few small communities (Wilbur, Creston, Davenport and Reardan) are present along U.S. Highway 2, which generally parallels the transmission corridor. The nearest is Creston, which is about one mile south of the corridor.

City of Spokane and Spokane County

The corridor passes through about 7 miles of the outer edge of the Spokane urban area, consisting mostly of distinct areas of expanding residential, industrial, commercial and institutional development (see Figure 3-3). Development has occurred up to the right-of-way. The corridor separates subdivisions, and is used by walkers, joggers, bicyclists, and motorcyclists.





Source: Rand McNally Spokane, Washington City Map, 1999

Figure 3-3 Map of Spokane Area

As the corridor enters the Spokane urban area from the west it crosses Riverside State Park. Riverside State Park is discussed in the section on **Recreational Land**. A small area of private land is within the park. This land is zoned Residential, 10-acre minimum parcel size. Large-acreage residential developments are scattered north and south of the corridor.

After crossing the Spokane River, the corridor passes through an area zoned Urban Residential, 3.5 lots per acre (see Appendix F for a map of Spokane area zoning). This area, north of Kendick Avenue and Sun Dance Golf Course and west of Nine Mile Road, is heavily wooded, with some residential development. Additional residential development is limited until more utility services are added (Penderson, 2002).

The corridor passes through two communities, Sundance and Woodridge, divided by Indian Trail Road. These communities are zoned Residential, maximum 3.5 lots per acre. Development of both of these communities has been completed and houses are adjacent to the corridor.

Near Indian Trail Road, the corridor converges with Avista's 110-kV transmission right-of-way and parallels it from corridor mile 78/6 to near the Bell Substation. The corridor crosses to the north of Avista's 110-kV transmission line right-of-way at corridor mile 81/7, west of Whitworth College.

The corridor extends within the northern edge of Spokane City limits between Nine Mile Road and the eastern edge of the Woodridge neighborhood. Land use in Spokane County north of the city limits is scattered, large-parcel, rural residential development. The land is zoned Rural Residential, and cannot be developed until utility services and roads for increased traffic are available (Penderson, 2002).

East of Woodridge, the corridor leaves the City of Spokane and re-enters Spokane County, where it climbs the west-facing slope of Five Mile Butte. It then crosses the top of Five Mile Prairie before dropping down the north-facing, heavily timbered steep slopes of the Butte. For the first mile between corridor mile 80/2 and 80/7, the corridor passes north of a residential subdivision on top of Five Mile Prairie. This area is zoned Suburban Residential, 1-acre minimum parcel size. Further development on the top of Five Mile Butte/Prairie depends on expensive extensions of city sewer and water utilities and improvements to major roads serving the area (Brokin, 2002). The area north of the corridor is the steep north-facing slope of Five Mile Butte. The steep slope and lack of utilities make development difficult.

East of Five Mile Road, the corridor travels down the steep north face of Five Mile Butte, which runs parallel to North Fivemile Road, and across Waikiki Road. Along North Fivemile Road, a few homes have views of the Little Spokane River Valley to the north.

Continuing to the east, the corridor passes Waikiki Road at corridor mile 81/9, and continues on north of Whitworth College's residential community.

Between Waikiki Road and U.S. Highway 395 (corridor mile 82/1 to 82/7), the corridor passes to the north of Whitworth College, where it forms a boundary between the Whitworth College campus to the south and the residential community of Brentwood to the north. Brentwood is completely developed to the northern boundary of the corridor. Whitworth College, a private 4-year liberal arts college, occupies 175 acres. Football and baseball fields have been developed south of the corridor, separated from the corridor by 200 feet of wooded area and Avista's right-of-way. The main campus is about 1,000 feet south of the corridor.

Between U.S. Highway 395 and U.S. Highway 2 (corridor miles 82/8 to 83/3), the transmission lines create a boundary between the residential communities of College Homes to the south and Camelot to the north. Both communities are fully developed up to the corridor.

After crossing U.S. Highway 2, the corridor borders a small commercial area (Hico Village Northpointe) consisting of a car wash and a RV parking area to the south, and commercial uses to the north. Some of these uses are present within the corridor.

The corridor then crosses industrial land before terminating at Bell Substation.

Agricultural Land

Agricultural land refers to pasture and irrigated and dry croplands. About one half of the existing transmission line corridor crosses agricultural land (see Table 3-1). Most agricultural land use is in Lincoln County, with the rest in western Spokane County. Most agricultural land is dry cropland used for growing cereal grains (wheat, oats, barley), hay, and rapeseed. Farmers cultivate and tend crops within and next to the corridor, often quite close to existing transmission towers.

Prime and Unique Farmland

Prime farmland refers to land that has the best combination of physical and chemical characteristics for producing food, feed, forage, fiber and oil seed crops. Prime farmland could include cropland, pastureland, rangeland, forest land or other land, but not urban lands or water. Unique farmland is land other than prime farmland that is used for the production of specific high value food or fiber crops. It has the special combination of soil quality, location, growing season, and moisture supply needed to economically produce sustained high quality and/or high yields of a specific crop when treated and managed according to acceptable farming methods. Based on these definitions there are no prime or unique farmlands in the corridor in Douglas and Grant counties. There are scattered patches of prime farmland within the corridor in Lincoln County, totaling 440 acres, and in the western half of the Spokane County, totaling 120 acres.

Rangeland

Rangeland includes open range (grasslands and shrublands), *scablands* and *woodlands*. About one-third of the corridor is rangeland. In Grant and Douglas counties and in central Lincoln County the corridor crosses open range and scablands. In eastern Lincoln County and western Spokane County, the corridor crosses open range interspersed with extensive areas of noncommercial woodlands. In many cases, non-commercial woodlands are associated with ravines and other drainage channels. Woodlands are interrupted by patches of open range, and lands cleared in past years for grazing and other agricultural uses.

Rangeland is used predominately for cattle and horse grazing, but also provides wildlife habitat and open space for recreation.

Recreational Land

Recreational land includes some open land and local and state parks. People use land and water in the counties and cities crossed by the existing corridor for both active and passive forms of recreation.

City of Grand Coulee and Grant County

The City of Grand Coulee has built North Dam Park near the intersection of State Highways 155 and 174 adjacent to the north dam of Banks Lake. North Dam Park has ball fields, picnic areas, tennis courts, parking areas, footpaths, and play areas. Further development of the park is planned, which would include a BMX bike track, wetlands and other play fields. Future development of the park will depend on the placement of tower structures and overhead transmission lines. North Dam Park is approximately 50.5 acres.

Rural Area Between Grand Coulee and Spokane

Between the cities of Grand Coulee and Spokane, rural areas offer limited public outdoor recreation such as hunting and fishing. Most rural land is privately owned. The open and wooded rangeland between Creston and Davenport has networks of four-wheel-drive roads and county and corridor access roads that provide access to Hawk Creek tributaries and surrounding lands. Also, county roads crossing or close to the corridor provide access to other streams for dispersed recreation.

City of Spokane and Spokane County

Riverside State Park, which is managed by the Washington State Parks Commission, is a 7,500-acre recreation and natural area next to the Spokane River. The park has areas for camping, picnicking, boating, hiking, horseback riding, and off-road vehicle use. The park also includes the Little Spokane River Natural Area, and an Interpretive Center. Spokane Hatchery, which is

managed by the State, is next to the park. The Centennial Trail runs through the park and is crossed by the Grand Coulee-Bell corridor.

In 2001, according to the Washington State Parks and Recreation, 1,334,721 visitors used the park during the day, and 8,570 visitors stayed overnight within the park (Price, 2002).

The City of Spokane owns 30 acres of undeveloped park site near the corridor. The site is just east of Indian Trail Road and is known as Meadow Glen (see Figure 3-3). The site is presently used as passive, natural resource land or conservation land. A small area of the park located at the intersection of Indian Trail Road and Bedford may be developed into a neighborhood park. However, there is no program or development schedule planned for the park any time soon. With the exception of the neighborhood park, the rest of the park will remain as conservation land (Crutchfield, 2002).

Two golf courses are close to the corridor. Sun Dance Golf Course is about 300 feet south of the corridor. The Spokane Country Club and Golf Course is approximately one-half mile from the corridor.

Local residents use the corridor to walk, hike, bicycle, and ride motorized vehicles (mostly motorcycles and off-road vehicles).

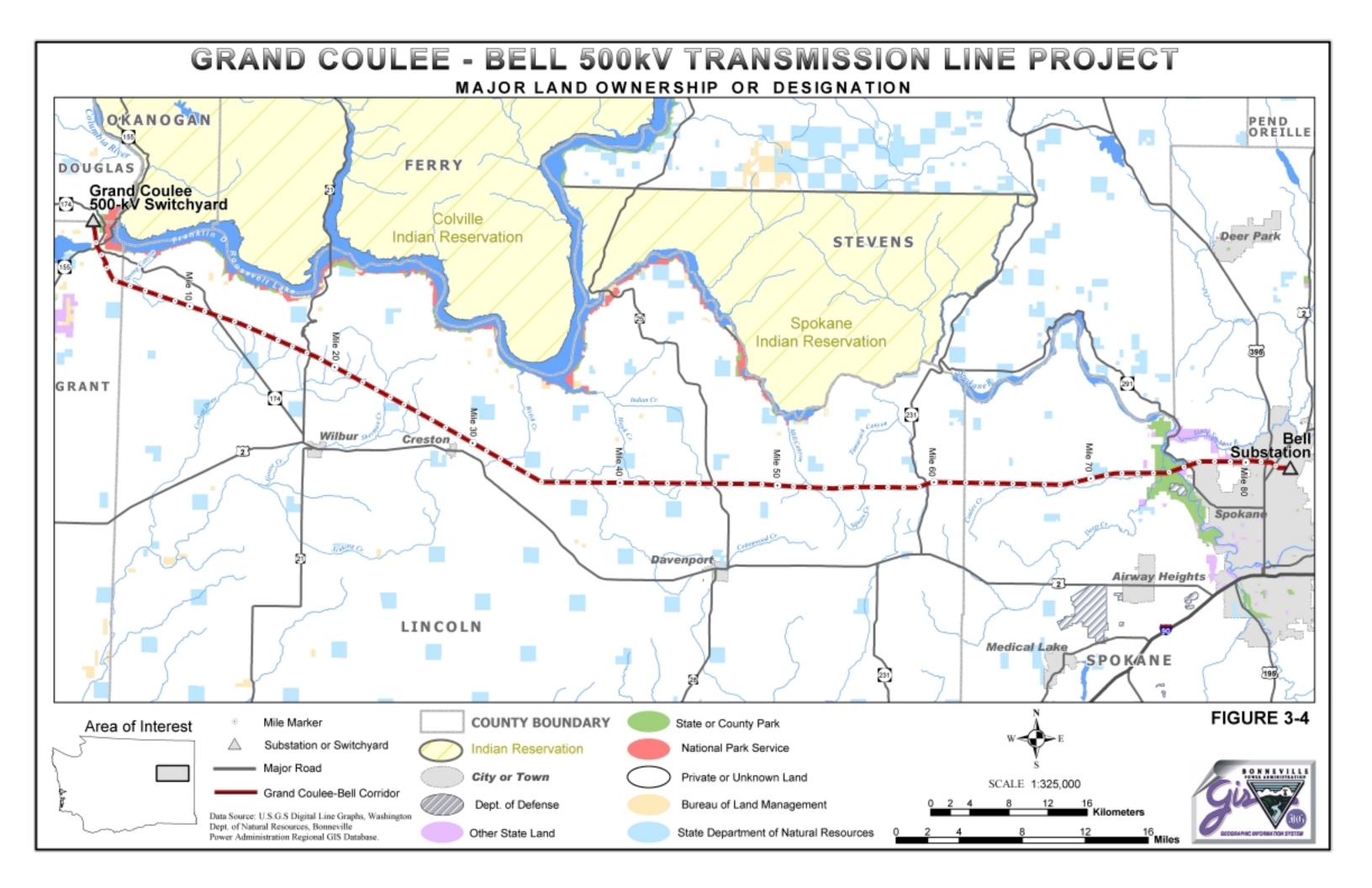
Whitworth College maintains many trails on its campus. Students and the public use the trails for cross-country training, walking, jogging, and mountain biking. Trails intersect the corridor in several places. Whitworth College also has football and baseball fields near the corridor.

Other

Other lands near the corridor include special use areas managed by the Federal or state government (see Figure 3-4).

Federally managed lands are found at each end of the corridor. At the west end, the Bureau of Reclamation owns and manages Grand Coulee Dam, the Visitor Center, and the Switchyard, which will be the terminus for one end of the proposed new transmission line. The National Park Service manages the Coulee Dam National Recreation Area along Lake Roosevelt. Lake Roosevelt has facilities for boating, fishing, camping, picnicking and other activities. No Park Service lands are crossed by the corridor.

The Washington Department of Natural Resources (*DNR*) manages trust lands near the corridor. DNR trust lands support a number of state facilities, such as public schools, universities, and prisons. No DNR trust lands are crossed by the corridor, but several parcels are within one-half mile.



At the east end, the Bonneville Power Administration owns and manages the land where the proposed new transmission line will terminate.

Plans and Policies Affecting Land Use

Each county and city crossed by the existing corridor has a comprehensive plan and a zoning ordinance. These jurisdictions have comprehensive land use plans that address utility corridors: the City of Grand Coulee, Lincoln County, Spokane County and the City of Spokane. The existing corridor is an allowed land use in these plans. For Douglas and Grant counties, whose plans do not address utility corridors, expansion and upgrading of existing utilities is permitted in the zones the corridor crosses.

Zoning ordinances in some jurisdictions specifically address utility corridors. The corridor is a permitted use in zoning ordinances for these jurisdictions: Lincoln, Grant, and Douglas counties. Spokane County and the City of Spokane zoning ordinances allow transmission line corridors as a permitted use in a variety of zones to a height of 125 feet (see Chapter 4, **State**, **Areawide**, and **Local Plan and Program Consistency**).

Environmental Consequences

This assessment of potential land use impacts from the proposed project is limited to changes in and interference with land use activities, effects on local traffic, and consistency with local plans. The proposed project would affect several resources closely related to land use such as public health and safety, visual resources, socioeconomics, vegetation, and air quality. Please refer to the resource sections in this chapter for discussion of these project effects.

Construction, operation and maintenance of a new transmission line typically changes some land within the corridor to permanent tower sites and access roads. However, for most of the length of the corridor, the existing land use is for transmission facilities and the proposed action would not change this. Estimates of land area involved or occupied by various aspects of the proposed project are summarized below:

	Developed	Agriculture	Range Recreational		Total
			(acres)		
Corridor (150' wide)	145	765	545	73	1,528
Tower construction (0.5 acre each)	20	105	75	10	210
Towers – permanent use (2,500 sf each	2.3	12	8.6	1.1	24
Staging areas (4 at 2 acres each)	0	4	4	0	8
Pulling/tensioning sites (every 2.5					
miles at 1 acre each)	3	17	12	1	34
Permanent access roads – new	3	0	11.1	1.5	15.6
Permanent access roads – improvemen	ts 10	0	37.5	5	52.5

Permanent access roads – spurs	1.2	0	4.5	0.6	6.3
Removal of wood pole structures	1.7	8.7	6.2	0.8	17.4
(1,000 sf each)					

During construction of towers, an estimated 210 acres would be disturbed. Land permanently needed for towers is estimated to be 24 acres. Staging areas and pulling/tensioning sites would require 42 acres during construction, which would be a temporary impact. Approximately 4.9 miles of new access road construction would be required, which would occupy slightly less than 16 acres; and about 2 miles of permanent spur roads to tower sites would be required, which would occupy an additional 6.3 acres. Another 16.6 miles of existing access roads would need to be improved, ranging from grading to widening and ditching; this would not represent a change in land use. Nearly all of the permanent access road improvements would take place in rangeland areas. Access roads in agricultural areas would be temporary for the most part. Where permanent access would need to be developed in these areas, it would principally affect non-cultivated areas (e.g., draws/gullies). Removal of the existing wood pole structures would cause a temporary disturbance to an estimated 17.4 acres; this area could be reclaimed for use after the structures are removed.

Construction, operation and maintenance could cause short-term impacts such as traffic detours and delays. Temporary disturbances from traffic in areas close to and more distant from the corridor are also common.

Impact Definitions

A **high** impact would occur if the project changes existing land uses completely and permanently, and if there is little or no potential for mitigation.

A **moderate** impact would occur if the project causes limited permanent changes in existing land uses or causes extensive and lengthy temporary disturbances, and there is some potential for mitigation.

A **low** impact would occur if the project leads to some brief, temporary disturbances to existing land uses that can be mitigated.

No impact would occur if the project does not trigger any changes in land use.

Developed Land

City of Grand Coulee and Grant County

BPA would need to acquire about 3.5 miles of new right-of-way easements in the Grand Coulee area. Less than one-half mile of this total would traverse developed land in this area (most of the remainder would traverse rangeland). The 150-foot right-of-way would encompass

approximately 64 acres total (about 8 acres of developed land). Temporary disturbance during construction would affect about 9 acres around tower sites (about 1 acre of developed land). However, on a permanent basis approximately 1 acre would be used for tower sites (about one-tenth of an acre of developed land – currently vacant but developable). About 3.1 acres would be needed for new access roads (assuming about 1 mile of new access roads will be needed in this area). Permanent access road improvements in this area would occur mostly on undeveloped rangeland and not on developed land. The new line would pass next to the Pleasant Hills rural residential neighborhood but would not directly affect residential use in this area.

The level of direct impacts from construction would be low, because they would be limited to brief, temporary, disturbance effects, mostly on traffic. Developing staging areas, constructing towers, improving access roads or building new access roads would take place on vacant land and would not displace existing uses. The level of direct impacts from operation/maintenance would be moderate due to some permanent but limited changes in land use caused by the new right-of-way (i.e., new towers and conductors, as well as access roads, that displace vacant land that is zoned for residential use). In view of the large number of transmission lines in the area, the new transmission line would be considered a compatible land use.

Conversely, the right-of-way of the existing Grand Coulee-Bell 115-kV line No. 1 that is being replaced would remain as right-of-way, but the wood poles would be removed. The land area that would become available for potential use would nearly offset the area displaced for tower sites under the proposed action.

Rural Area Between Grand Coulee and Spokane

Rural residents near the corridor may experience temporary inconveniences from closed roads, more traffic, and construction or improvement of access roads. In this area, residences and other developed areas are distant from each other, and construction would disturb few properties. The level of indirect land use impacts on developed land is expected to be low because disturbance would be minimal and temporary. No direct land use impacts are expected in rural areas.

City of Spokane and Spokane County

As the corridor crosses Nine Mile Road from the west (corridor mile 77/5), it enters the Spokane urban area. In the area between Nine Mile Road and Bell Substation (between corridor miles 77/5 and 84/4), direct and indirect impacts could include increases in traffic, detours along some roads, and disrupted access to driveways and/or businesses along the corridor. Access road improvements would be made at a few locations and a new corridor path approaching Bell Substation would be established across BPA property. Access road improvements would generally consist of blading the surface and adding new crushed rock. New access road improvements in this area would take place within the corridor for the most part, would not affect developed land uses, and would not represent a land use change.

Some existing uses between corridor mile 83/4 and 83/6 may be affected. As noted previously, some commercial uses are present adjacent to and within the corridor in this area, which is at the western edge of the Kaiser-Mead industrial area. Activities that currently are allowed in this area under the 115-kV Grand Coulee-Bell No. 1 line right-of-way may be determined to be incompatible with the construction and operation of the proposed 500-kV line. Therefore, there may be some change in land use on the right-of-way that would affect commercial activities. Potential loss of income for landowners may result because of the changes to commercial uses. The level of impacts at this location would be moderate.

All other impacts on developed areas would be temporary, short term and low, except new permanent access roads. The level of impacts due to new access roads would be moderate; although they are permanent, they would be constructed within the existing corridor and therefore would not represent a change in land use.

Agricultural Land

Potential direct impacts to agricultural land during construction could include interference with farming activities next to and within the corridor. Farming activities that may be affected include choice of machinery, tilling and plowing patterns, kinds of crops, and timing of planting. Some construction activities could prevent agricultural uses; others may make farming in some areas inconvenient or more costly.

Construction would temporarily take 765 acres out of production for one growing season on a cumulative basis (approximately one-half during one growing season and the other one-half the next growing season). This is based on a "worst-case" scenario of a 150-foot wide, 42-mile long right-of-way in agricultural areas. Actual losses, however, likely would be much less, since in most cases only the area surrounding the tower site (about one-half acre), the access road leading to the site, pulling/ tensioning sites and staging areas, and where the wood pole structures are being removed would be kept out of production.

Impacts would be widespread, and would cause temporary land use changes and disruptions, but they can be mitigated. The level of impacts would be moderate.

Once the towers have been constructed, impacts on agricultural land uses vary. New towers create a permanent loss of agricultural lands. The space needed for new towers would take approximately 12 acres of agricultural land out of production permanently. About 3.8 acres are prime agricultural lands. The net loss would be less after subtracting land regained from the removal of the wood pole line from the land needed for new tower sites (net loss of about 3.3 acres with an estimated 1 acre being prime farmland). Wood pole structure sites would be restored for productive use, and essentially all access roads across cultivated farmland would be returned to production after construction.

Other impacts created from maneuvering farm equipment around new towers could be more difficult or more costly. However, aligning the new towers with the existing 230-kV transmission line towers should improve maneuverability of farm equipment. Soil compacted, disturbed, or eroded could lower crop production. Weeds could be introduced in and next to the corridor. Towers and conductors would incrementally increase hazards for aerial spraying.

Some of these impacts can be mitigated through careful placement of towers to facilitate equipment maneuvering, aggressive weed control, and other mitigation. The level of impacts on agricultural land use from operation and maintenance of the line is expected to be moderate.

Rangeland

During construction, the only potential impact is disturbance to vegetation within the corridor to accommodate construction activities, discussed in the **Vegetation** and **Wildlife** Sections. Approximately 75 acres of rangeland within the corridor would be disturbed for tower construction, assuming a one-half-acre area around each tower would be disturbed during construction. Also, staging areas and conductor pulling/tensioning sites may be located on rangeland. Assuming two 2-acre staging areas would be located in rangeland areas and 1-acre pulling/tensioning sites are needed every 2.5 miles, then an additional 16 acres of rangeland would be temporarily disturbed. Changes in rangeland during construction would be minor and temporary. The level of impacts is expected to be low.

The permanent loss of about 8.6 acres of rangeland to accommodate the footprint of the new towers, less the land reclaimed from removal of the wood pole line (6.2 acres), would be minor. In addition, an estimated 15.6 acres of rangeland would be converted to use for access roads assuming all new permanent access roads will occur in rangeland areas. These would be the only long-term effects, as land within the corridor could continue to be grazed. The level of impact would be considered moderate.

Recreational Land

City of Grand Coulee and Grant County

The City of Grand Coulee has developed North Dam Park next to corridor mile 2/3 of the Grand Coulee-Hanford line. As noted previously, the park includes ball fields, picnic areas, tennis courts, a play lot, trails, parking and landscaping built between transmission lines and structures. There is presently a large problem with diffuse knapweed in the park. Construction and maintenance activities could further spread the *noxious weed*.

Though BPA is coordinating with the city on tower placement, further development of the park could be permanently impacted. These impacts would depend on where the transmission lines cross the park, because no structures, parking, or fields can be built under the lines. The impact level would be moderate.

Rural Area Between Grand Coulee and Spokane

The area along the corridor providing the greatest opportunities for recreational activities is the network of four-wheel drive trails and county roads that access Hawk Creek, its tributaries and surrounding lands.

Potential direct and indirect impacts to recreational access for Hawk Creek and other streams along the corridor could include increased traffic from construction vehicles, and temporary closures of local roads during construction activities. Impacts would be minor and temporary, and the impact level is considered to be low.

City of Spokane and Spokane County

Trees may be removed or topped in Riverside State Park. Tower sites would be permanently converted from park use (net change of 0.3 acre), and about 2.1 acres of park land within the existing corridor would be used for new access roads. Tower construction and pulling/tensioning sites would affect about 15 acres on a temporary basis. Temporary disturbances during construction, and to a lesser extent during operation, would also affect park activities along and near the corridor. This would include interruptions in use of the Centennial Trail. There is limited opportunity for mitigation. The level of impacts to the park and Centennial Trail would be moderate.

Direct and indirect impacts to recreational uses of Whitworth College campus include the proximity effects of construction and traffic activity. These activities could disrupt existing land uses and campus recreational activities, but effects would be temporary and minor, and the level of impacts would be low.

Although public recreation in the corridor is not allowed, many recreational activities occur such as walking, jogging, bicycling, and motorcycling. These activities take place at various sites along the corridor near neighborhoods or subdivisions, or at sites such as Whitworth College. These activities may be disrupted on a short-term basis during construction, but would likely be unaffected on a long-term basis. The level of impact is considered to be low.

Plan Consistency

The corridor passes through a number of jurisdictions that have local land use plans and policies. The project is generally consistent with these adopted plans. At this time, the project could be inconsistent with Spokane County's height restriction (125 feet) for transmission towers (see Chapter 4, **State**, **Areawide**, **and Local Plan and Program Consistency**). The Agency Preferred Action would use towers that would nominally be 125 feet tall, except where the corridor narrows between structures 83/1 and 83/6 where 175-foot tall towers would be used. In

addition, some locations with longer spans may require taller towers that would exceed 125 feet. The Alternative Action would use towers that are 175 feet tall.

Cumulative Impacts

In general, because the proposed action is the rebuild of an existing transmission line in the corridor with three other lines, cumulatively, the impacts represent a relatively small increment of change. Only a small amount of land would be removed from uses other than transmission lines. The greatest change would be one of scale (the corridor would have three lines with lattice steel towers) and the perception of land use compatibility. Because the incremental change would be small, compatibility issues would likely be minor. Likewise, short-term proximity impacts associated with construction (noise, dust and traffic interference) would result in minor cumulative impacts.

The City of Grand Coulee has grown and developed because of hydropower generation from the nearby dam. In the immediate area, transmission lines, generating facilities and switching stations are commonplace. Upgrading of lines and stations would not change its character, nor would it change land uses significantly. The Grand Coulee-Bell corridor would pass through North Dam Park and the city is concerned that construction activities would increase the spread of noxious weeds such as diffuse knapweed, which already heavily infests the park area.

In the rural sections through Douglas, Grant, or Lincoln counties, the permanent loss of agricultural land and rangeland from this project would be approximately 40 acres. Losses would be small compared to the total agricultural and rangeland acreage in the area. Lincoln County alone has about 876,000 acres in cultivation. Since 1992, there has been a reduction of about 125,000 acres cultivated land. The amount of land temporarily taken out of production, and the amount of cultivated agricultural land not being used would be negligible compared to the total amount of agricultural lands in production. There are no other known plans or proposed projects that would remove agricultural lands from production in Lincoln, Douglas or Grant counties that would result in adverse cumulative impacts.

Improved access would open up areas for recreational uses. As development increases over the next ten years, demands on public parks, such as Riverside State Park, will increase proportionately. Increased activity/use within Riverside State Park and other open spaces could lead to a greater level of compatibility impacts with park users.

In the greater Spokane area, land uses are changing rapidly. Over the next 5 to 10 years, demand for parks, roads, schools and other neighborhood amenities may increase. Development in urban and some rural areas within Spokane County are driven by the availability of utilities and the type of land uses allowed. There is a 6-year plan to provide sewer capacity north of North Five Mile Road, in the Waikiki Road area (Spokane County Capital Facilities Plan, 2001), which would tend to stimulate residential development. Other developed areas within the greater Spokane area are either built out, designated as rural conservation, urban reserve or are

designated commercial, industrial and mixed use. Increased development activity and human presence over time would contribute to cumulative impacts such as associated traffic congestion, potential land use compatibility conflicts, and other impacts of proximity to transmission lines.

There are no projects planned now or in the future that would remove agricultural lands, rangeland or scrublands within northwestern Spokane County. The Spokane County Comprehensive Plan protects these lands from incompatible development so they can continue to benefit future generations (Spokane County Comprehensive Plan 2001, 11/2001).

Residents and representatives of park areas and institutions have expressed concern about rebuilding in the corridor. Some feel they are being asked to bear the impacts of a regional power transmission grid while not receiving any direct benefits. They fear the present corridor will continue to be used in the future for rebuilding rather than establishing new corridors, and they will be affected more than those who benefit from future expansion.

Environmental Consequences of the Alternative Action

The Alternative Action Alternative would include all the components of the Preferred Action except a double-circuit line would be constructed between corridor mile 75/2 and Bell Substation, a distance of about 9 miles. The corridor and towers would be the same as shown on Figure 2-3. The double-circuit towers would occupy a slightly larger footprint and therefore remove additional land from existing uses. Otherwise, land use impacts would essentially be the same as for the Agency Proposed Action.

Mitigation

Mitigation reduces or prevents impacts on the natural environment during, and/or after construction. Mitigation can include avoiding an impact altogether, lessening impacts by limiting the size of a construction or maintenance action, correcting an impact by repairing or restoring, reducing or eliminating the impact over time by preservation or maintenance, and compensating for the impact by replacing or providing substitute resources or environments.

The following mitigation would reduce potential impacts to land use from the project:

- A schedule of construction activities will be distributed to all landowners along the corridor that could be affected by construction.
- BPA will coordinate with the City of Grand Coulee to site towers within North Dam Park. This will improve compatibility with park uses and help reduce long-term impacts to future park development.
- Existing roads within North Dam Park will be graveled to reduce the spread of noxious weeds.

- During and after construction, areas of high weed concentrations in North Dam Park would be pre-treated during plant emergence to reduce weed spread.
- During construction activities BPA would use Best Management Practices to limit erosion and the spread of noxious weeds.
- Temporary disturbance during construction would be limited by careful planning and scheduling of construction activities. Construction will be scheduled, when practical, to try to minimize to the extent possible displacement of crops and interference with farming activities.
- Restore compacted soil in cropland.
- Farmers would be compensated for crop damage.
- Place new towers parallel to existing towers, where practical, making it easier to maneuver farm equipment around the structures.
- BPA will revegetate with native grass species except in cropland.
- BPA will continue to work with Riverside State Park officials to locate access roads to ensure minimum disturbance to vegetation where practical.
- BPA will work with Riverside State Park officials to alert users of the Centennial Trail when the trail near the corridor would be closed for construction activities. BPA would minimize the amount of time that the trail would be closed by keeping work duration and the number of closures to the least amount possible to complete the work.

Environmental Consequences of the No Action Alternative

Existing land uses in the project corridor would continue under the No Action Alternative. Impacts associated with the ongoing operations and maintenance activities for the existing transmission line, substations, right-of-way, and accesses roads would continue. No new land use impacts would be expected.

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